APPENDICES E - O

Analysis of Quality and Cost Measures and Display for the MyHealthCareOptions Website

April 2009

Task 1 Final Report

E. Cost Materials Prepared by Milliman, Inc.

This document was prepared in accordance with the terms and condition provided in the Subcontractor Agreement between Milliman, Inc. and Massachusetts Health Quality Partners. A user of this document is advised of the following caveats:

1) This document is solely intended to serve as an input to a comprehensive report that will be produced by MHQP for QCC. This document is not intended to stand alone and should not be distributed to any third parties beyond MHQP. MHQP may cite Milliman as a source within the final version of the comprehensive report as it relates to only the content presented in this report.

2) Much of the information provided in this document was found on third-party websites. Milliman did not attempt to verify the accuracy of the information provided on these websites. If the information is inaccurate on incomplete, the findings described herein may be inaccurate or incomplete. Furthermore, the findings described herein were an accurate reflection of website content as various days during the week of February 16, 2009.

3) Although we attempted to conduct a complete review of third-party websites, products, and services we cannot guarantee that our review was exhaustive. It may be possible for another organization to conduct a similar review and identify other data sources that could contribute supplemental or contradictory information.

4) Milliman makes no claim that the client will be able to directly apply the approaches or strategies of other websites described in this document, to the client's unique situation.

F. Cost Website Characteristics and Capabilities

Evaluation of Cost Sites (Table 1)			
Organization	**Site**	**Site Title**	**Website Focus**
Massachusetts Healthcare Cost and Quality Council	http://hcqcc.hcf.state.ma.us/	My Healthcare Options	Broad Consumer Focus including information to select hospitals
PricePoint Websites			
Texas Business Group on Health	www.txpricepoint.org/	PricePoint	Broad Consumer Focus on cost of hospital procedures
Virginia Hospital and Healthcare Association	www.vapricepoint.org/	PricePoint	
New Hampshire Hospital Association	www.nhpricepoint.org/	PricePoint	
Oklahoma Hospital Association	www.okhospitalpricing.org/	PricePoint	
Wisconsin Hospital Association	www.wipricepoint.org/	PricePoint	
Utah Hospitals and Health Systems Association and Utah Dept. of Health	www.utpricepoint.org/	PricePoint	
Oregon Association of Hospitals and Health Systems	www.orpricepoint.org/	PricePoint	
Nevada Hospital Association	www.nvpricepoint.net/	PricePoint	
Iowa Hospital Association	www.iapricepoint.org/	PricePoint	
Montana Hospital Association	www.montanapricepoint.org/	PricePoint	
New Mexico Hospital Association	www.nmpricepoint.org/	PricePoint	
Hospital Association of Rhode Island	www.ripricepoint.org/	PricePoint	
Nebraska Hospital Association	www.nhacarecompare.com/Coverage.aspx	PricePoint CareCompare	
Other State Websites			
New Hampshire Health Cost	www.nhhealthcost.org	New Hampshire Health Cost	Broad Consumer Focus including information to select hospitals
Rhode Island Dept. of Health	http://www.health.ri.gov/chic/performance/index.php	Performance Measurement and Reporting	Public Health Research Focus
Pennsylvania Healthcare Cost Containment Council	http://www.phc4.org/reports/hospitals.htm	PHC4	Public Health Research Focus
Commercial Website			
Carol.com	www.carol.com	Carol.com	Consumer and Provider focus

Evaluation of Cost Sites (Table 2)						
Organization	**How Measures are Searched**	**Categories Reported**	**Category Drill Down Capabilities**	**Data Source**	**Type of Cost Data**	**Utilization Data**
Massachusetts Healthcare Cost and Quality Council	• Location • (Radius) • Provider • Procedure	• Bone and Joint Care • Digestive System • Heart Care • Obstetrics • Respiratory • Outpatient Diagnostic Procedures • Outpatient Radiation	The website allows the user to drill down to more specific procedures within each of the basic categories.	• Insurance carriers and patients	• 4 categories of cost rankings • Actual Paid by Mass Health Plans unadjusted Amounts	• None Reported
PricePoint Websites						
Texas Business Group on Health Virginia Hospital and Healthcare Association New Hampshire Hospital Association Oklahoma Hospital Association Wisconsin Hospital Association Utah Hospitals and Health Systems Association and Utah Dept. of Health Oregon Association of Hospitals and Health Systems Nevada Hospital Association Iowa Hospital Association Montana Hospital Association New Mexico Hospital Association	• Location • Provider • Procedure • Inpatient • Outpatient	• 10 most common types of hospitalizations • Alcohol and Drug Abuse • Bones, Joints, Muscles • Childbirth and Newborns • Heart/Cardiovascular • Psychiatric • Rehabilitation • Stomach/Digestive	There are two search level capabilities within the PricePoint sites. • Non-healthcare professionals can search using a Basic Query within the basic categories listed. These categories allow further drill down to more specific DRG based procedure groupings. • Those more familiar with coding can conduct an Advance Comprehensive Query allowing a search by Major Diagnostic Categories (MDCs) and then a further drill down to Diagnosis Related Groups (DRGs).	• Hospitals	• Average hospital collections from Medicare, Medicaid, and all payors (graph form) • Average Charge • Average Charge per Day • Median Charge	• Number of Discharges • Average Length of Stay

Evaluation of Cost Sites (Table 2)						
Organization	How Measures are Searched	Categories Reported	Category Drill Down Capabilities	Data Source	Type of Cost Data	Utilization Data
Hospital Association of Rhode Island						
Nebraska Hospital Association						
Other State Websites						
New Hampshire Health Cost	• Location (Radius) • Provider • Procedure	• Preventative Health • Emergency Visits • Radiology • Surgical Procedures • Maternity	After entering their insurance information users can start by picking one of the categories to the left and then drilling down further to a specific procedure level.	• Insurance carriers and patients	• Actual paid amounts for providers and procedures • Amounts paid by provider and patient	None Reported
Rhode Island Dept. of Health	• Not searchable • Available only as a PDF	• Total Hospital per-capita cost by state for all states	This data is not readily searchable. It is presented in PDF and Excel format and must be downloaded and examined. It does not address specific procedures or procedure costs.	National databases not specified on website	• Per-Capita hospital cost data by state	• Inpatient Admission • Inpatient Day Use Rate • Inpatient Surgical Rate • ER use Rate • Outpatient Visit Rate • Outpatient Surgical Rate
Pennsylvania Healthcare Cost Containment Council	• By Facility	• Net Income • Net Revenue • Total Margin	This data is not readily searchable. It is presented in PDF format and must be downloaded and examined. It does not address specific procedures or procedure costs.	N/A	• Annual hospital financial data	None
Commercial Website						
Carol.com	• Location • Provider • Procedure • Insured • Uninsured	• Medical • Cosmetic • Behavioral	Can drill down to specific health "packages" of care within each basic category. Labeled by diagnosis.	• Hospitals	• Health Cost Packages with est. avg. cost. Based on Charges.	None

Evaluation of Cost Sites (Table 3)										
Organization	**Statistical Method**	**Included Providers**	**Risk/Age Adjusted**	**Grouping Methods**	**Benchmarks**	**Source**	**Transfer Cases**	**Medicare Medicaid**	**Minimum Sample Size**	**Statistical Significance**
Massachusetts Healthcare Cost and Quality Council	Median	All hospitals in the state of Mass Hospitals broken down by campus when available.	Adjusted for severity of illness on a scale of 1-4	Inpatient claims grouped using 3M's (APR-DRG) grouper software, version 24.	No External Benchmarks Comparisons within cohort	Mass health plan Database composed of Massachusetts Healthplan Claims data Not including Medicare Medicaid	Care for patients treated in one hospital and then transferred to another hospital is included in the data Costs may be underestimated because they are split.	Datasets do not include Medicare, Medicaid or other public payor info.	Data shown for hospitals with 30 inpatient discharges or 30 outpatient visits for given condition. Rated for conditions where at least 10 Mass hospitals provided at least 30 discharges or 30 visits.	Tests used to determine if cost is *Above Average Quality* or *Below Average Quality*. Performed at 0.05 significance level. There is a 5% chance the size of the difference could have occurred by chance.
PricePoint Websites										
Texas Business Group on Health Virginia Hospital and Healthcare Association New Hampshire Hospital Association Oklahoma Hospital Association Wisconsin Hospital Association Utah Hospitals and Health Systems Association and Utah Dept. of Health Oregon Association of Hospitals and	Average Charge Average Charge per Day Median Charge	All hospitals from each state EXCEPT those too small to submit data, i.e. 50 patients per quarter or less.	Information Not Available	Major Diagnostic Categories (MDC) Diagnosis Related Groups (DRG)	No External Benchmarks Comparisons within cohort	Data submitted by all state hospitals	No info	No info	No info	No info

Evaluation of Cost Sites (Table 3)										
Organization	Statistical Method	Included Providers	Risk/Age Adjusted	Grouping Methods	Benchmarks	Source	Transfer Cases	Medicare Medicaid	Minimum Sample Size	Statistical Significance
Health Systems										
Nevada Hospital Association										
Iowa Hospital Association										
Montana Hospital Association										
New Mexico Hospital Association										
Hospital Association of Rhode Island										
Nebraska Hospital Association										
Other State Sites										
New Hampshire Health Cost	Median	All hospitals in New Hampshire No information by hospital campus	No Adjustment	Case descriptions based on Medicare (DRG) Does not use the actual DRG assignments.	No External Benchmarks Comparisons within cohort	New Hampshire Comprehensive Health Information System (NHCHIS) database Not including Medicare Medicaid	No info	No info	No info	No info
Rhode Island Dept. of Health	Total Cost is divided by total population by state	All hospital providers in each state.	NO Adjustment	No Groupings beyond state	No External Benchmarks	Hospital Statistics 2006 Ed. Almanac of Operating Indicators 2006 Ed. Ingenix	No info	No info	No info	No info
Pennsylvania Healthcare Cost Containment Council	Dollars per provider	All Pennsylvania Hospitals	NO Adjustment	No Grouping N/A	Provide state averages. No historical Averages or benchmarks	Hospital financial reports	No info	No info	No info	No info

Evaluation of Cost Sites (Table 3)										
Organization	Statistical Method	Included Providers	Risk/Age Adjusted	Grouping Methods	Benchmarks	Source	Transfer Cases	Medicare Medicaid	Minimum Sample Size	Statistical Significance
Commercial Website										
Carol.com	Average by provider	Limited Participating Hospitals and Insurers	Information not available	Not Explained. Appears to be by diagnosis	No External Benchmarks Side by side comparison within cohort	Data submitted by participating providers	No info	No info	No info	No info

G.   Cost and Utilization Databases

Databases (Table 1)		
Name of Database	**Site Link**	**Sponsoring Organization**
InGenix Databases	www.ingenix.com/SearchResults/?searchText=databases&catLimit=0	UnitedHealthcare
MedPar	www.cms.hhs.gov/MedicareFeeforSvcPartsAB/03_MEDPAR.asp#TopOfPage	Center for Medicare and Medicaid Services (CMS)
HCUP Nationwide Inpatient Sample (NIS)	www.hcup-us.ahrq.gov/nisoverview.jsp	Agency for Healthcare Research and Quality
HCUP State Inpatient Databases (SID)	www.hcup-us.ahrq.gov/sidoverview.jsp	Agency for Healthcare Research and Quality
HCUP State Ambulatory Surgery Databases (SASD)	www.hcup-us.ahrq.gov/sasdoverview.jsp	Agency for Healthcare Research and Quality
Consumer Assessment of Healthcare Providers and Systems (CAHPS) Database	www.cahps.ahrq.gov/content/NCBD/NCBD_Intro.asp?p=105&s=5	Agency for Healthcare Research and Quality

Databases (Table 2)						
Name of Database	**Description of Data Included**	**Source of Data**	**Categories Reported**	**Type of Content (Hospital Claims, etc.)**	**Public/Private**	**Search Method**
InGenix Databases	• Claims Databases • Benchmarking Databases	• Public and Private claims databases.	• Procedure Cost • Utilization • Trends • Cost Changes	• Claims	• Private	• Procedure • Location
MedPar	• Information for 100% of Medicare beneficiaries using hospital inpatient services. • Data provided by state and then by DRG for all short stay and inpatient hospitals for fiscal years 2004-2006.	• Hospital inpatient Medicare claim data	• Utilization • Covered charges • Total Days • Number of discharges • Average total days • Medicare Reimbursement	• Claims	• Public	• State • Location • Diagnosis
HCUP Nationwide Inpatient Sample (NIS)	The Nationwide Inpatient Sample (NIS) is one in a family of databases and software tools developed as part of the Healthcare Cost and Utilization Project (HCUP).	• AHRQ Inpatient Discharge Data • Survey of hospital ambulatory discharge data	• Procedure Cost • Utilization	• Claims	• Public	• Procedure
HCUP State Inpatient Databases (SID)	The State Inpatient Databases (SID) are one in a family of databases and software tools developed as part of the Healthcare Cost and Utilization Project (HCUP).	• AHRQ Inpatient Discharge Data • Survey of hospital ambulatory discharge data	• Procedure Cost • Utilization	• Claims	• Public	• Procedure
HCUP State Ambulatory Surgery Databases (SASD)	The State Ambulatory Surgery Databases (SASD) are one in a family of databases and software tools developed as part of the Healthcare Cost and Utilization Project (HCUP).	• AHRQ Inpatient Discharge Data • Survey of hospital ambulatory discharge data	• Procedure Cost • Utilization	• Claims	• Public	• Procedure
Consumer Assessment of Healthcare Providers and Systems (CAHPS) Database	The National CAHPS Benchmarking Database (also referred to as the CAHPS Database) is the national repository for data from CAHPS surveys. It includes 11 years of data from the Health Plan Survey as well as two years of data from the new Hospital Survey.	• Survey Data	• Procedure Cost • Utilization	• Survey Data	• Public	• Procedure

H.   Data Analysis Tool Capabilities

Data Analysis Tools (Table 1)			
Name	**Site**	**Product Name**	**Organization**
VIPS	www.vips.com/index_govt_domain.cfm?page=govt_domain	VIPS Government Solutions Group, VIPS HealthPayer Solutions Group	General Dynamics Information Technology Company
MedInsight	www.medinsight.milliman.com/about.asp	MedInsight	Milliman, Inc.
Milliman Health Cost Index	www.milliman.com/expertise/healthcare/products-tools/health-cost-index/	Health Cost Index	Milliman, Inc.
MedStat	www.home.thomsonhealthcare.com/Solutions/index.aspx	MedStat	Thomson Healthcare UnitedHealth Group
Ingenix	www.ingenix.com/AboutUs/	Multiple Tool Names Dependant on Needs	UnitedHealth Group
Healthgrades Database	www.healthgrades.com/content-data-licensing/web-portals/	HealthGrades	HealthGrades
Milliman Health Cost Guidelines	www.milliman.com/expertise/healthcare/products-tools/health-cost-guidelines/	Health Cost Guidelines	Milliman, Inc.

Data Analysis Tools (Table 2)							
Name	**Description**	**Functionality (how searched)**	**Information Collected**	**Benchmarks (Type)** *e*	**Website (Focus)**	**Data Warehouse Capabilities**	**Risk/Age Adjusted**
VIPS	•Data management •Warehousing •Customizable solutions for reporting and regular data based decision making •EBMs •Analytics •Decision Support •Process Automation	•Search for Health Plan Services •Search for Employer Plans Services •Evidence Based Measures •ETGs •RFI	• Costs • Clinical • Operational • Utilization	•Cost •Quality •Utilization •DRGs •Pharmacy •Medicaid •Medicare	• Payors • Providers • Employers	Yes	Yes
MedInsight	•Warehouse support •Benchmarking •trend monitoring •Decision support tools •grouping •EBMs •Data Management •Reporting •Visualization •Process Automation	•Search for Health Plan Services •Search for Employer Plans Services •Evidence Based Measures •ETGs •RFI	• Costs • Clinical • Operational • Utilization	•Cost •Quality •Utilization •DRGs •Pharmacy •Medicaid •Medicare	• Payors • Providers • Employers	Yes	Yes
Milliman Health Cost Index	•measure of healthcare cost changes Benchmarking focus •data gathered from hospitals, physicians, and pharmacies to capture fluctuations in healthcare costs per capita for the overall U.S. population (excluding Medicare).	•Search for Health Plan Services •Search for Employer Plans Services •Evidence Based Measures •ETGs •RFI	• Costs • Clinical • Operational • Utilization	•Cost •Quality •Utilization •DRGs •Pharmacy •Medicaid •Medicare	• Payors • Providers • Employers	Yes	Yes
MedStat	•Warehousing •analytics •grouping •reporting tools and interfaces •EBMs •Data Management •Decision Support •Reporting •Medicaid Focused	•Search for Health Plan Services •Search for Employer Plans Services •Evidence Based Measures •ETGs •RFI	• Costs • Clinical • Operational • Utilization	•Cost •Quality •Utilization •DRGs •Pharmacy •Medicaid •Medicare	• Payors • Providers • Employers	Yes	Yes

Data Analysis Tools (Table 2)							
Name	**Description**	**Functionality (how searched)**	**Information Collected**	**Benchmarks (Type) e**	**Website (Focus)**	**Data Warehouse Capabilities**	**Risk/Age Adjusted**
Ingenix	• Warehouse support • Analytics • Grouping • Reporting tools and Interfaces • EBMs • Publishing • Geo-mapping • Decision Support • Reporting • Benchmarking • Claims management	• Search for Health Plan Services • Search for Employer Plans Services • Evidence Based Measures • ETGs • RFI	• Costs • Clinical • Operational • Utilization	• Cost • Quality • Utilization • DRGs • Pharmacy • Medicaid • Medicare	• Payors • Providers • Employers	Yes	Yes
Healthgrades Database	• Health ratings • Quality data and content available for purchase and licensing.	Unknown	• Costs • Clinical • Operational • Utilization	• Cost • Quality • Utilization • DRGs • Pharmacy • Medicaid • Medicare	• Payors • Providers • Employers	Yes	Yes
Milliman Health Cost Guidelines	• Grouping • Benchmarking • Reporting • Analytics • Data Manipulation • Data Management	• Search for Health Plan Services • Search for Employer Plans Services • Evidence Based Measures • ETGs • RFI	• Costs • Clinical • Operational • Utilization	• Cost • Quality • Utilization • DRGs • Pharmacy • Medicaid • Medicare	• Payors • Providers • Employers	Yes	Yes

I.   Cost Data Groupers

Groupers (Table 1)		
Name	**Site**	**Providers of Grouping Software**
3M APR Diagnosis Related Group (DRG) Grouper	http://solutions.3m.com/wps/portal/3M/en_US/3M_Health_Information_Systems/HIS/Products/APRDRG_Software/	3M, Inc.
Symmetry Episode of Treatment (ETG) Grouper	http://www.symmetry-health.com/products/product_SETG.php	Ingenix, Inc.
Symmetry Episode of Risk Group (ERG) Grouper	http://www.symmetry-health.com/products/product_SERG.php	Ingenix, Inc.
Thomson Medical Episode Group (MEG) Grouper	http://home.thomsonhealthcare.com/Collateral/view/?id=340	Thomson Healthcare
3M Ambulatory Payment Group (APG) Plus	http://multimedia.mmm.com/mws/mediawebserver.dyn?6666660Zjcf6lVs6EVs666NteCOrrrrQ-	3M, Inc.
3M Ambulatory Payment Category (APC) Grouper Plus	http://www.3m.com/product/information/APC-Grouper-Plus-Software.html	3M, Inc.

Groupers (Table 2)				
Name	**Purpose**	**What is Grouped**	**Description**	**Publically Available Algorithm?**
3M APR Diagnosis Related Group (DRG) Grouper	Procedure grouping taking into account severity of illness.	Diagnosis	3M™ APR DRG Software is widely used for adjusting large volumes of data to reflect severity of illness and risk of mortality. 3M APR DRGs are an extension of the basic DRG structure that includes four severity-of-illness levels and four risk of mortality levels within each DRG. The 3M APR DRG severity and mortality subclasses are assigned according to a clinical logic that simultaneously evaluates the interactions of multiple co-morbidities, age, procedures, and principal diagnosis.	Yes
Symmetry Episode of Treatment (ETG) Grouper	Using claims information as inputs, ETG grouping technology captures data on the relevant services and prescriptions provided during a patient's treatment and "groups" claims information into meaningful episodes of care.	Episode of Treatment	Illness classification and episode-building grouping technology that creates a unit of analysis called an episode of care. The grouping concept is similar in some ways to Diagnostic Related Groups (DRGs), except DRGs are limited only to inpatient services, while ETGs group all relevant medical and pharmacy services, regardless of place of service.	No
Symmetry Episode of Risk Group (ERG) Grouper	Using medical and pharmacy claims information - as well as demographic data - as inputs, the ERG software generates individual health risk scores. The ERG risk scores are based on the episodes of care created by the ETG grouper.	Risk	Uses episodes-of-care methodology (ETGs) to create measures of current and future health risk for individuals and groups. Medical and pharmacy claims information along with demographic data are the inputs. Each individual risk score predicts a member's current and future need for healthcare services and associated costs.	No
Thomson Medical Episode Group (MEG) Grouper	Enables government agencies to analyze patient treatments, evaluate quality of care, and manage associated costs.	Severity of Illness	Groups inpatient, outpatient, and pharmaceutical claims into clinically homogeneous units of analysis called episodes that describe a patient's complete course of care for a single illness or condition.	No
3M Ambulatory Payment Group (APG) Plus	APGs help explain the kinds and amounts of resources an outpatient visit requires and classify patients with similar clinical characteristics.	Ambulatory Episodes	3M Plus displays Ambulatory Payment Groups (APG) in a comprehensive searchable interface for consumers.	No
3M Ambulatory Payment Classification (APC) Grouper Plus	Grouping Hospital Outpatient Claim Costs	Ambulatory Episodes by Cost	3M™ APC Grouper Plus Software processes APC data The output is a flat ASCII data file.	Yes

J.   List of Websites Reviewed for Quality Measures

Website/Organization Name	URL
American Academy of Family Physicians	http://www.aafp.org/online/en/home/practicemgt/quality.html
Acumentra Health	www.acumentra.org
AHRQ	http://www.ahrq.gov/
AQAF	http://www.aqaf.com
Arkansas Foundation for Medical Care	www.afmc.org
California Health Care Foundation/California Institute for Health Systems Performance	www.calhospitals.org
California Office of Patient Advocate	http://www.opa.ca.gov/report_card/
Calvert Memorial Hospital	www.calverthospital.com/patients/index.html
Center for Medical Consumers	www.medicalconsumers.org
Centers for Medicare and Medicaid Services	www.cms.hhs.gov/quality/hospital
CIMRO of Nebraska	www.cimronebraska.org
Clinical Outcomes Assessment Program	http://www.coap.org/
Colorado Foundation for Medical Care	www.cfmc.org
Connecticut Department of Public Health	www.dph.state.ct.us
Connecticut Hospital Association	www.cthosp.org
Consumer's Checkbook	www.checkbook.org/hospital
Delmarva Foundation for Medical Care	www.dcqio.org
Excellus Blue Cross/Blue Shield	www.bcbsny.org/apps/HospitalQuality/introduction.jsp
Federation of American Hospitals	www.fah.org
FMQAI	www.fmqai.com
Georgia Medical Care Foundation	www.gmcf.org
Health Care Choices	www.healthcarechoices.org
Health Care Excel	www.hce.org
Health Grades Inc.	www.healthgrades.com
Health Market Insights	www.myhealthcompass.com
Health Services Advisory Group	www.hsag.com
Healthcare Quality Strategies, Inc.	www.hqsi.org

Website/Organization Name	URL
HealthInsight	www.healthinsight.org
Hospital Compare	http://www.hospitalcompare.hhs.gov
Hospital Quality Alliance	http://www.aha.org
Illinois Foundation for Quality Health Care	www.ifqhc.org
Information & Quality Healthcare	www.iqh.org
Institute for Healthcare Improvement	http://www.ihi.org
Iowa Foundation for Medical Care	www.internetifmc.com
IPRO	www.ipro.org
Joint Commission on Accreditation of HealthCare Organizations	www.jcaho.org
Kansas Foundation for Medical Care, Inc.	www.kfmc.org
Licking Memorial Health Systems	www.lmhealht.org/healthinfo/qualityreports
Louisiana Health Care Review	www.lhcr.org
Louisiana Healthcare Quality Forum	http://www.lhcqf.org/data-tools/quick-stats.html
Maine Health Management Coalition	www.mhmc.info/best/volumes.php
Maryland Health Care Commission/Health Services Cost Review Commission	http://hospitalguide.mhcc.state.md.us
Massachusetts Health Quality Partners	www.mhqp.org
Masspro	www.masspro.org
MetaStar, Inc.	www.metastar.com
Michigan Health and Hospital Association	www.michiganhospitalprofiles.org
Michigan Health and Safety Coalition	www.mihealthandsafety.org/2003_consumer/home.html
Missouri Department of Health and Senior Services	www.health.state.mo.us/publications/vpg.html
Missouri Hospital Association	www.mhanet.com
Mountain-Pacific Quality Health Foundation	www.mpqhf.org
MPQH-Wyoming	www.mpqhf.org
National Association for Healthcare Quality	http://www.nahq.org/
National Association of Children's Hospitals and Related Institutions (NACHRI)	www.childrenshospitals.net

Website/Organization Name	URL
New Jersey Department of Health And Senior Services	www.state.nj.us/health/hcsa/cabgs01/cabg_consumer01.pdf
New Jersey Healthcare Quality Institute	http://www.howsyourhealthnj.org/
New Mexico Health Policy Commission	www.healthlinknm.org/guide
New Mexico Medical Review Association	www.nmmra.org
New York State Department of Health	www.health.state.ny.us/nysdoh/heart/heart_disease.htm
Niagara Health Quality Coalition/Alliance for Quality Health Care	www.myhealthfinder.com
North Dakota Health Care Review, Inc.	www.ndhcri.org
Northeast Health Care Quality Foundation	www.nhcqf.org
Ohio KePRO	www.ohiokepro.com
Oklahoma Foundation for Medical Quality	www.ofmq.com
Pacific Business Group on Health	www.healthscope.org
Pacific Business Group on Health/Office of Statewide Health Planning and Development	www.pbgh.org
PacifiCare Health Systems Inc.	www.pacificare.com
Pennsylvania Health Care Cost Containment Council	www.phc4.org
Pennsylvania Health Care Quality Alliance	http://www.phcqa.org/
Premier, Inc/Centers for Medicare and Medicaid Services	www.cms.hhs.gov/quality/hospital
Primaris	www.primaris.org
QSource	www.qsource.org
Qualidigm	www.qualidigm.org
Qualis Health	www.qualishealthmedicare.org
Quality Insights of Delaware	www.qide.org
Quality Insights of Pennsylvania	www.qipa.org
Quality Partners of Rhode Island	www.qualitypartnersri.org
QualityNet	http://www.qualitynet.org
Rhode Island Department of Health	www.health.ri.gov/chic/performance/hospitals.htm
Select Quality Care powered by	www.selectqualitycare.com

Website/Organization Name	URL
HealthShare	
South Dakota Foundation for Medical Care	www.sdfmc.org
Stratis Health	www.stratishealth.org
Subimo, LLC	www.subimo.com
Surgical Clinical Outcomes Assessment Program	http://www.scoap.org/
Texas Business Group on Health/Dallas-Fort Worth Business Group on Health	http://tbgh.org/checkup
Texas Health Care Information Council	www.thcic.state.tx.us
The Alliance: Employer Health Care Alliance Cooperative	www.qualitycounts.org/report_interactive.htm
The Carolinas Center for Medical Excellence	www.thecarolinascenter.org
The Cleveland Clinic and the Quality Institute of the Cleveland Clinic Health System	www.clevelandclinic.org/quality
The Community Healthcare Coalition, Inc.	www.ehpco.com/images/guide.pdf
The Hospital Quality Initiative (HQI)	http://www.cms.hhs.gov/HospitalQualityInits/
The Joint Commission	www.jointcommission.org
The Leapfrog Group for Patient Safety	www.leapfroggroup.org/consumer_intro1.htm
The Office of Statewide Health Planning and Development	www.oshpd.ca.gov
The Orange County Register	www.ocregister.com/news/2003/hospitals/reportcards.shtml
TMF Health Quality Institute	www.tmf.org
US News and World Report	www.usnews.com/usnews/health/hosptl/tophosp.htm
Virginia Health Information	www.vhi.org
Virginia Health Quality Center	www.vhqc.org
Wisconsin Collaborate for Healthcare Quality	http://www.wchq.org/
Wisconsin Collaborative for Healthcare Quality	www.wiqualitycollaborative.org
Wisconsin Hospital Association	www.wicheckpoint.org
WVMI Quality Insights	www.qiwv.org
Doctor Foster Health (UK)	http://www.drfosterhealth.co.uk/hospital-guide/

Website/Organization Name	URL
National Health Services Choices (UK)	http://www.nhs.uk/servicedirectories/Pages/ServiceSearch.aspx

K. Evaluation Form for Health Care Quality Websites

Overall organization of information	Meets criterion fully	Could be improved	Does not meet	COMMENTS
• Website structure reinforces the purpose				
• Each page can stand on its own				
Welcome Page (home page)				
• First page is critical in engaging consumer				
• Has brief definition of quality and cost in consumer-oriented language				
• Lists reasons for publishing comparative data – why you have given this information and where it comes from				
• Gives several reasons one should look at this information; *convinces audience that info is both interesting and beneficial –reasons to focus on quality and/or costs*				
• Explains how they can use info to make better decisions				
• Provides a brief summary of information on the site – *perhaps using terms like "care that protects patients from errors and harm"; "care that is proven to work" and "care that is responsive to a patient's needs and preferences"*				
• Use of subheads and bullets				

K. Evaluation Form for Health Care Quality Websites				
Overall organization of information	**Meets criterion fully**	**Could be improved**	**Does not meet**	**COMMENTS**
• Link at the bottom immediately takes user to the data				
• Has both Cost and Quality together where both exist				
Other pages of the website that can be reached by a link or tab				
• Caveats or cautions that reader cannot assess a providers' overall performance by looking at a limited set of measures that reflect only some of the services they provide				
• Detailed discussion of methods used, including minimum level of observations (e.g. denominator size), use of confidence levels, statistics used, case-mix and risk adjustments and methods of aggregation				
• Data sources and limitations				
• FAQ				
• Checklist of what to discuss with provider				
• Additional information on what consumer can do if he or she has condition discussed in the measure				
• Methods to provide feedback or ask questions about the report				
Organization of performance data				
• Tells audience why each measure is important to them in language they can understand and relate to; *links process measures with health*				

K. Evaluation Form for Health Care Quality Websites

Overall organization of information	Meets criterion fully	Could be improved	Does not meet	COMMENTS
outcomes				
• Is explicit about what the measures says about the provider organization. *While acknowledging that the responsibility may be shared, explains what the provider organization can do to improve performance*				
• Notes whether a high score or a low one means better performance				
• If rare events are reported they are done so as counts and ideally aggregated over several years				
• Reports on each measure separately				
• Report measures by category (e.g. disease specific or all preventive care and all chronic care management) (?)				
• Includes summary (roll-up) overall score (?)				
• Can view a full report on all relevant measures for one provider				
Comparative reports for multiple organizations				
• Uses internal comparisons and/or targets				
o Average				
o Best performer				
o Median				
o Top quartile or other percentile (e.g. 15%tile)				
o Improvement since last report				
• Compares providers to external benchmark or goal				

K. Evaluation Form for Health Care Quality Websites

Overall organization of information	Meets criterion fully	Could be improved	Does not meet	COMMENTS
o In absolute terms e.g. bar chart or tables				
o In relative terms - tiers				
• Includes explanation for why benchmarks are included and justification for selecting these specific benchmarks				
• Describes statistics used in simple language, with link to more details				
• Discuss methods briefly; minimize detail on page with link to more details				
• Provide technical more detailed info in a link				
Content/Design				
Plain and clear language				
• Short simple and familiar words (no jargon, acronyms)				
• Unavoidable medical and tech. terms explained as they are used				
• Content in an "active" voice rather than passive one				
• Word use is consistent throughout				
• Limited no. of messages delivered				
Relevant to the audience				
• Assume little background knowledge				
• Minimizes the amount of data presented				
Format				
• A lot of white space				
• Conducive to reading and understanding				

K. Evaluation Form for Health Care Quality Websites

Overall organization of information	Meets criterion fully	Could be improved	Does not meet	COMMENTS
• Need for scrolling is minimized				
• Links are clearly provided				
• Contact information is easy to find				
• Use standard page design and same symbols and icons throughout				
• Use pull down menus sparingly				
• Tables/Charts are readable and self explanatory				
• Provide guidance of what they are looking at, how to read graphs, understand measures				
• Tables/Charts are a manageable size				
Navigability				
• Search options available				
o Distance from zipcode				
o By provider name				
o By disease category				
o BY measure type				
o Other category of search				
• Easy to determine how to start a new search				
• Uses explicit step-by-step navigation procedures whenever possible				
• Incorporate Previous Page and next Page buttons				
• Set of tabs at the top to help users get to the main sections from anywhere in the report				

K. Evaluation Form for Health Care Quality Websites

Overall organization of information	Meets criterion fully	Could be improved	Does not meet	COMMENTS
• Set of tabs at the side to help users navigate within report sections				
• Internal links from one part of the report to another				

L.   Sources of Criteria for Evaluation:

1.   Accessible Health Information Technology for Populations with Limited Literacy: A Guide for Developers and Purchasers of Health IT *Prepared for:* National Resource Center for Health IT
Agency for Healthcare Research and Quality US Department of Health and Human Services
540 Gaither Road
Rockville, MD 20850
www.ahrq.gov
Prepared by:
Julie Eichner and Prashila Dullabh
NORC at the University of Chicago
AHRQ Publication No. 08-0010-EF
October, 2007

2.   Usability.gov (US Dept of Health and Human Services) **How do I create a user-centric Web site?**

3.   http://www.nlm.nih.gov/pubs/checklist.pdf. Making Your Web Site Senior Friendly

4.   **Talking Quality.gov**
Talking to Consumers about Health Care Quality
URL: www.talkingquality.gov

5.   AQA Principles for Public Reports on Health Care

6.   *Best Practices in Public Reporting No. 2:*
Maximizing Consumer Understanding of Public Comparative Quality Reports: Effective Use of Explanatory Information
Prepared for the Agency for Healthcare Research and Quality
Contract No: HHSA290200710022T
Prepared by the Center for Health Improvement
Shoshanna Sofaer, DrPH, and Judith Hibbard, DrPH
January 2009

7.   **Public Reporting in Health Care: How do Consumers Use Quality-of-Care Information? A Systematic Review**
Marjan Faber, PhD, Marjie Bosch, MSc., Hib Wollersheim, MD, PhD, Sheila Leatherman, PhD, and Richard Grol, PhD
Medical Care, Volume 47, Number 1, January 2009

8.   Health Care Quality and Cost Summary of Key Focus Group Findings, Prepared by Opinion Dynamics Corporation, December 2007

9.   Feedback acquired by consumer usability and council testing sessions in August, 2008, with DHCFP and Council members – provided by Medullan on February 26, 2009

Appendix M. Website Review- Recommendations for Areas of Improvement

Welcome Page (home page)	Short term recommendations	Long term recommendations
Definitions of quality and cost The home page should provide a brief definition of quality and cost in consumer-oriented language. This home page assumes that consumers have some understanding of quality and cost. Some of this explanation is found in the FAQ but the viewer does not know this.	Include a "What is quality" and a "What is cost" section as bullets integrated into the questions on the homepage. These bullets should hyperlink to "What is quality?" and "What is cost?" questions in the FAQ section of the website.	If viewers click on "what is quality" they would go to another page with a simple definition of quality and what can be viewed on the website.
Possibly misleading expectations The homepage is somewhat misleading in that it directs consumer to enter zip code information to find and compare quality and cost information on hospitals, but there is not any comparative cost information available on patient safety and patient experience and no quality info on many of the conditions. This could frustrate consumers who are expecting a report on both.	Make it clear on the homepage that currently both cost and quality information may not be available for a given condition and that additional measures will be added as measure definitions and data become available. Add a question mark icon after the statement "Find and compare quality and costs at Massachusetts hospitals." This question mark will lead the user to the "about the ratings" section of the website where there will be language added that explains why cost and quality do not show for every measure.	

Welcome Page (home page)	Short term recommendations	Long term recommendations
Explanation of use of the information • The site notes that comparative information should be used as a tool when talking to one's doctor but does not mention that it should not be used as the *only* tool. • There is no immediate information or checklist of what to discuss with provider other than some links to sites on other pages. • There is no caveat or caution that clearly states that the reader cannot assess a provider's overall performance by looking at a limited set of measures that reflect only some of the services they provide.	Add a section on how to use this data when talking to your doctor as it relates to each measurement area. Add narrative on the fact that the information on this website is a part of the picture of the value offered by each provider organization but not a complete view. Explain and acknowledge that the responsibility may be shared. This could be placed on the *Family/Patient* page. Add links to sites that explain what the provider organization can do to improve its performance.	
Home page layout The first page of a site is critical in engaging consumers. While the QCC home page has many good qualities, it might have too much focus on the picture and tagline. As a result, the *find* tool (where you enter your zipcode to find hospitals to compare) is not the focus of the homepage, which may confuse consumers as to how to use the website.	While maintaining all the current elements of the homepage, make the *find* tool a larger and more prominent part of the homepage.	After making all other edits, use opportunity to redesign homepage. One possible way to do this is to remove the comparison tool from the home page. On the home page have a larger link reading "Begin comparing providers" which take the user to a beginning search page

About the Ratings	Short term recommendations	Long term recommendations
Consumer-friendly language • Site does include detailed discussion of methods used, but not in plain language, which makes the section less user-friendly than it might be. It does not meet need to be conducive to reading and understanding. • Also the page is very long.	Either accept that this page is for a more sophisticated audience and label it *Technical Discussion of Methods* and create a more basic explanation of these issues in an *About the Ratings* section or redraft this section to meet both needs.	If funding allows, this page could be turned into several pages with a tool bar on the left side of the page that allows one to go to the issue one wants to learn more about. Consider having descriptions of what data user is looking at appear in floating boxes when cursor moves over categories.
Summary Page	**Short term recommendations**	**Long term recommendations**
Relationship between cost and quality Page has both cost and quality where measures of both exist for a given condition but where cost is used alone there could be negative consequences given consumer misunderstandings about the relationship between quality and cost.	Have a statement on each page that perhaps says "Higher costs do not necessarily represent better quality. In fact some research has shown that both high cost and low cost providers can give excellent healthcare and both high and low cost providers can give poor quality healthcare."	
Understanding relationship between symbols and statistical significance Stars and dollar signs as well as the statistical significance underneath them are confusing– especially when they send conflicting message. For example – multiple hospitals can receive three stars, but one can be 'no difference from average quality' while another is 'below average quality.'	Consider removing statistical significance from *summary* page.	Consider total redesign of the summary page/detail page layout (see examples) We propose to develop new rating system that is clearer for the consumer. Move to bar chart for costs with bar representing the $15^{th} – 85^{th}$ percentile costs in each hospital compared to 15th -85th percentile cost across entire state.

Summary Page	Short term recommendations	Long term recommendations
Clarify meaning of summary scores • Summary scores can be deceptive. If user does not click on the 'details' section, he or she will never see any of the numbers associated with the summary. • Overall score for Patient Experience is unclear… is it based on answer to one question or a composite? • In general where the detail shows more than one variable related to a measure category, e.g. heart attack with 9 factors, it is unclear what the stars represent – the score on one variable? A merged overall score? The mean score on all of the variables?	More clearly explain what is being summarized by providing details of how summary scores are created For example, when quality stars are based solely on mortality rates make that explicit on summary page.	Consider total redesign of the summary page/detail page layout (see examples). Develop new rating system that is clearer for the consumer. For example, instead of having too much data displayed or displayed in two different places, develop functionality to expand/collapse data on page, so users can decide what they would like on page. (see examples)
Number of messages on outpatient diagnosis costs On most outpatient diagnosis procedures, e.g. cardiac testing and CT scanning, there is too much cost info on one page. It is overwhelming to the reader. Detail page is much clearer.	Consider removing summary page for these measures	Consider total redesign of the summary page/detail page layout. Develop new rating system that is clearer for the consumer. For example: Move to bar chart for costs with bar representing the $15^{th} - 85^{th}$ percentile costs in each hospital compared to 15th -85th percentile cost across entire state.

Summary Page	Short term recommendations	Long term recommendations
Labeling *Summary* page should be labeled as such	Change the title from **Comparison of Providers** to: **Comparison of Hospitals *Summary Page***	
Detail Page	**Short term recommendations**	**Long term recommendations**
Accessibility of ways to learn more • Page does tell user if a higher or lower score means better performance, which is important and very useful. However, information about what the measures mean is not immediately obvious. • Information about what consumer can do if they have this condition can only be reached through a link on the detail page to an external site, e.g. Medline.	Consider moving the information about the measure to the *summary* page. Make link to "learn more" about a condition more prominent – not included in the "more" on quality on the *detail* page that one only reaches from the *summary* page. Develop an exit page when linking to webpages that QCC did not develop. For example, when QCC links to Medline, user should be directed to a page that says, "You are leaving the QCC site, and will be redirected to outside information…"	Consider total redesign of the summary page/detail page layout. Consider having descriptions of what data user is looking at appear in floating boxes when cursor moves over categories. QCC should consider developing its own language on measures and integrate into summary or detail page.
Labeling *Detail* page should be labeled as such	Change the title from **Comparison of Providers** to: **Comparison of Hospitals *Detail Page***	

Comparative measures	Short term recommendations	Long term recommendations
Percentile comparisons Confusing use of cost percentiles both for individual hospital and in comparison to all hospitals in state • Were median costs for all hospitals used to determine the $ signs? *"The hospital is among the least costly. This cost is lower than 85% of all hospitals in the state."* • What cost? The median, the 85th percentile cost within the hospital? The average cost? No explanation of how the percentile ranking for stars was calculated when they summarize more than one measure result. • How are the rankings determined? Are all individual measures equally weighted and their numerators and denominators added together to determine an overall score which is then ranked??	Provide more information on how the comparisons are made, specifically what costs and what quality results are being compared and how the ranking is created. This could be on the *About the Ratings* page or more clearly labeled in the legend.	Consider total redesign of the summary page/detail page layout.
Comparing to average On *Summary page* there is a confusing use of stars and statistical significance. In some cases 3 stars is above average but 4 stars is not. This is explained on *detail page* but the explanation is confusing. It might say the cost is above average but no $$ signs because of insufficient data. This could be very confusing to average user.	Statistical significance makes more sense on the detail page than on the summary page	

Comparative measures	Short term recommendations	Long term recommendations
State benchmarks State average or rate or percentile data only shows up in detailed view. Not clear whether the comparison is to a state population based rate, state population based average, or average or median of all provider scores. Explanation of stars and $ signs only mentioned in legend. There is no discussion or justification for using these benchmarks.	It would be helpful if state benchmarks were displayed and explained more clearly and prominently	Should consider national or NE regional benchmarks for quality where available Consider integrating improvement since last report as a benchmark. Consider using best performer, best within geographic area, whole state, or, for quality, the nation as a benchmark. This is used in some sites and is very effective.
Full Report on One Provider	**Short term recommendations**	**Long term recommendations**
Availability of full reports Users cannot view a full report on all relevant measures for one provider. They can only pull up one measure at a time, not a summary report with the results for one hospital on one or two printer friendly pages.		Create a new page that summarized data for one provider, with ability to convert summary sheet into a PDF or excel file.

Navigability	Short term recommendations	Long term Recommendations
Website is somewhat difficult to navigate	Use explicit step-by-step navigation procedures whenever possible Display links to welcome/home page and new search more prominently. Create a Home Tab at top of the page as with the five tabs, it is not entirely clear that only clicking on the top banner brings the user home. Add a "Previous page" and "Next page" link to every page Allow for search more than 20 miles from the zip code as user may want to compare local hospitals to Boston or Worcester hospitals. Consider changing "Search provider name" to "Search hospital name" so users knows they should not put in their doctor's name. Add "Return to summary page" at bottom of detail page Place the return buttons at top and bottom of each page, as some are very long and require a lot of scrolling.	Redesign to allow for adding a new provider from the same geographic area to a search similarly to how one can remove a provider from a search. As other types of providers are added there will be a need to modify the provider search function to include physicians, nursing homes , etc.

Navigability	Short term recommendations	Long term Recommendations
Definition of links • "Return to search results" is a potentially confusing title. This link takes one back to the page with all providers listed. To many users, "results" are likely to mean *performance* results rather than provider name results from the zip code search. • "Start a new search" is also a confusing title. This link brings user back to the home page. To many users, "New search" is as likely to mean asking about performance of the same providers in a new category as it is to mean selecting completely new providers.	Consider changing "Return to search results" to "Return to the hospital selection page" Consider changing "Start a new search" to "Return to home page to look in different zip code range" Consider making "Return to search results" button a "Return to comparison results", as there is no way to get from a single hospital back to the three or four hospitals the user was originally comparing.	Possibly develop a feature that allows user to refine search criteria, refine search, or start new search. This would be integrated into the search results pages so the users would be able to easily refine their search options. (see example)
Printing If users print from toolbar, output is small, narrow and cuts off sections from longer pages, e.g. *About the Ratings*, *FAQ*	Add a 'print' button option that reformats page for easy printing	

Content/Design	Short term recommendations	Long term recommendations
Website uses acronyms excessively.	Review each acronym to ensure it is necessary and if so add definition in each spot used.	Consider whether it would be effective to have a glossary of terms for the website that would include all the acronyms referred to on the website, along with any other terms that may be confusing for users
Visual presentation of legends Too much information is presented in the legends (not enough "white space"), which can overwhelm the viewer.	Redesign the legend to include more white space.	
Page design The page is very long and skinny and requires a lot of scrolling. There is too much green space on either side.	Consider widening the frame with less green on either side in order to decrease length of pages and scrolling.	
Font Size There is a feature already present on the website that allows users to change the font size of the text on the site. It is not explained on site, so users may not know it exists.	Insert phrase "change font size" next to font tool at top of page.	

N. Examples from Best Practices for Cost and Quality Websites

New York State Health Accountability Foundation, Health Care Report Card

http://www.abouthealthquality.org/index/hmo_report_card

About: The New York State Health Accountability Foundation is a public-private partnership dedicated to promoting transparency in the health care system and providing employers and consumers with reliable information on health care pricing and quality. Every year, it publishes a Health Care Report Card reviewing the quality of care delivered to New Yorkers. In addition to New York, site has data on Connecticut, New Jersey, Rhode Island and Vermont.

Homepage: Homepage has clearly labeled "how to use this report" and FAQs. User enters 'report card' tool through link near center of page.

Search Method: Site compares data for HMOs and for hospital in region. Search originates from map where user can narrow down the selection first by state and then by county.

Display of Results: Compares all results on same chart, not able to compare a selection of hospitals within region. User cannot compare results outside of counties. Dropdown menu at top of screen allows user to switch between hospitals and HMOs. Ratings are a combination of percentages and colored circles that denote better, average, or worse than state average. Arrows denote whether rating has improved or worsened since the last report (report done yearly). Clicking on the HMO or hospital name brings user to report card for that organization.

Definitions of Ratings, Data, and Categories: Legend data and category definitions pop out into bubble on window, making it easier for consumer to read definition and look at data simultaneously. Categories not being displayed are listed down the left-hand side. Forward and back buttons at the bottom of screen allow users to page through all measures.
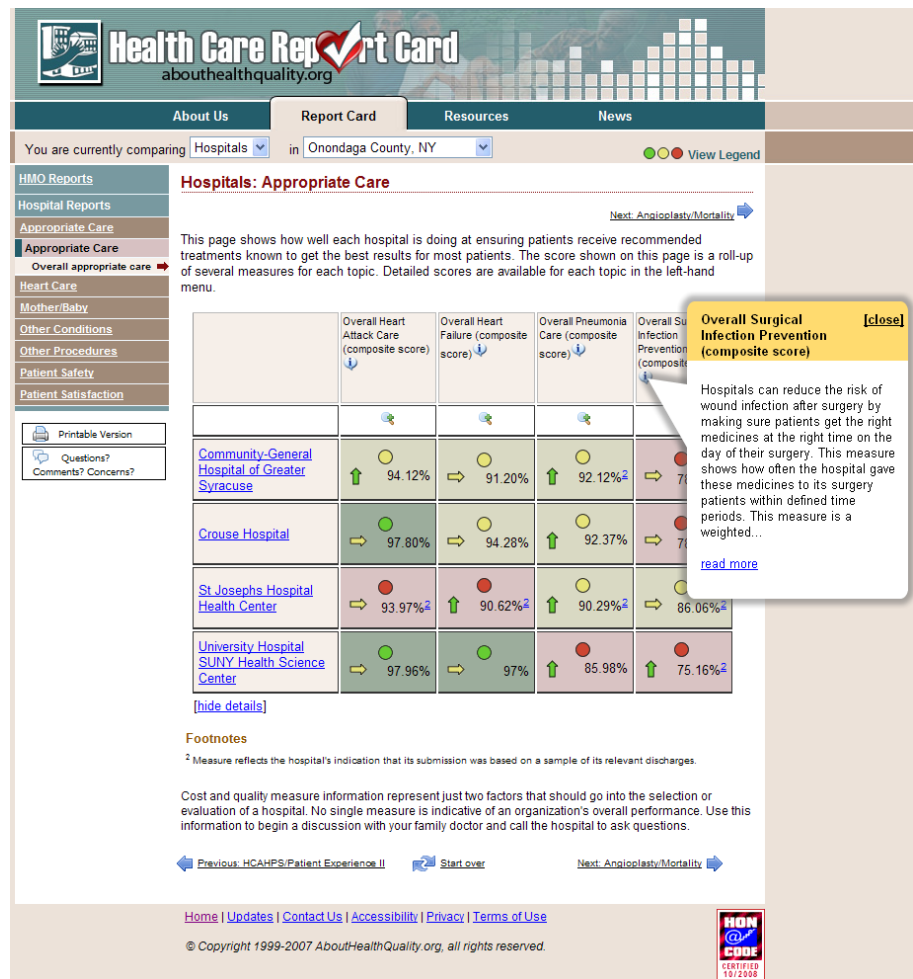
Hospital Care – A quality tool provided by Medicare

http://www.hospitalcompare.hhs.gov

About: Hospital Compare was created through the efforts of the Centers for Medicare & Medicaid Services (CMS), the Department of Health and Human Services, and other members of the Hospital Quality Alliance: Improving Care Through Information (HQA). The information on this website comes from hospitals that have agreed to submit quality information for Hospital Compare to make public.

User Friendly Welcome Page: Welcome page includes an introduction to the website, why the website is important, and how to use the information. There are links to specific types of quality information and hospital-specific information directly from welcome page. Find and Compare Hospitals button is very visible on welcome page, in the middle of screen.

Search Method: Search method is a step-by-step process that is easy for a user to follow. Step 1 - Search by 5 different location criteria (hospital name, zip code, city, state/territory, and county); Step 2 – medical condition, surgical procedure, or general search. If the user searches by medical condition or surgical procedure, they can further narrow the topic. Step 3 brings the user to the comparison chart – where all the results are displayed – and they can choose up to three hospitals to compare.

Display of Results: Y-axis displays hospitals, while X-axis displays comparison categories and sub-categories. Data is split into three subcategories – process, outcome, and patient experience and is displayed in percentages. Subcategories – which are hidden in tabs – can be a bit confusing. Ability to convert data into chart or graph makes for easy comparison. Graphs also compare hospitals to state and national average.

Compare Hospitals

Print this page

Below are the hospital(s) you selected with their related information.

Your Selected Hospitals	HALLMARK HEALTH SYSTEM	LAHEY CLINIC HOSPITAL	WINCHESTER HOSPITAL
	585 LEBANON STREET MELROSE, MA, 02176 (781) 979-3000	41 & 45 MALL ROAD BURLINGTON, MA, 01803 (781) 744-5100	41 HIGHLAND AVENUE WINCHESTER, MA, 01890 (781) 729-9000
	Acute Care Mapping & Directions	Acute Care Mapping & Directions	Acute Care Mapping & Directions

Show Information — **Hospital Process of Care Measures** [What is This?] — Back to Top

Show Information — **Hospital Outcome of Care Measures** [What is This?] — Back to Top

Hide Information — **Survey of Patients' Hospital Experiences** [What is This?] — Back to Top

	HALLMARK HEALTH SYSTEM	LAHEY CLINIC HOSPITAL	WINCHESTER HOSPITAL
	Acute Care	Acute Care	Acute Care

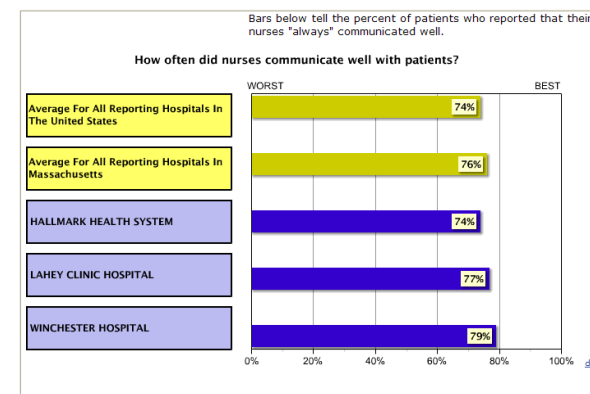Check the boxes next to the topics for which you would like to view correlating graphs or tables.

Select All — Reset Checkboxes — View Graphs — View Tables

Topic	HALLMARK	LAHEY	WINCHESTER
Percent of patients who reported that their nurses "Always" communicated well.	74%	77%	79%
Percent of patients who reported that their doctors "Always" communicated well.	79%	81%	82%
Percent of patients who reported that they "Always" received help as soon as they wanted.	55%	63%	63%
Percent of patients who reported that their pain was "Always" well controlled.	68%	70%	71%
Percent of patients who reported that staff "Always" explained about medicines before giving it to them.	59%	62%	63%
Percent of patients who reported that their room and bathroom were "Always" clean.	61%	70%	71%
Percent of patients who reported that the area around their room was "Always" quiet at night.	47%	47%	46%
Percent of patients at each hospital who reported that YES, they were given information about what to do during their recovery at home.	82%	83%	81%
Percent of patients who gave their hospital a rating of 9 or 10 on a scale from 0 (lowest) to 10 (highest).	58%	71%	72%
Percent of patients who reported YES, they would definitely recommend the hospital.	63%	77%	79%

Select All — Reset Checkboxes — View Graphs — View Tables

Graph 1 of 2

Hide Information — **How often did nurses communicate well with patients?**

These results are from patients who had overnight hospital stays from April 2007 through March 2008.

Patients reported how often their nurses communicated well with them during their hospital stay. "Communicated well" means nurses **explained things clearly, listened carefully** to the patient, and treated the patient with **courtesy and respect.**

Bars below tell the percent of patients who reported that their nurses "always" communicated well.

How often did nurses communicate well with patients?

WORST — BEST

Average For All Reporting Hospitals In The United States	74%
Average For All Reporting Hospitals In Massachusetts	76%
HALLMARK HEALTH SYSTEM	74%
LAHEY CLINIC HOSPITAL	77%
WINCHESTER HOSPITAL	79%

0%   20%   40%   60%   80%   100%

Definitions of Ratings, Data, and Categories: 'What is this?' link under each category for easy access to definitions.

Other: At top of page, user can access map with hospitals. Website is printer friendly. Buttons for comparison at top and bottom of page. Top and Bottom buttons also let user jump from beginning to end of page. Modification of some or all of search results is always available at top of page.

FAQs: Frequently asked questions are always accessible at top left corner of screen. Complex actions have their own help buttons. Glossary provides definitions for over 60 terms.

Focus on Hospitals

http://www.focusonhospitals.com/index.aspx

About: The Missouri Hospital Association designed this site for consumers interested in learning more about the hospitals and health systems that serve Missourians. The reports from MHA provide information about the care consumers can expect to receive at Missouri's hospitals, as well as the hospitals' significant economic contributions to their communities.

Notable Practices

Homepage: From homepage, user can quickly click on a few links that bring it directly to the quality reporting page.

Search Method: User is able to search by hospital or by quality of care condition. When searching by hospital, user can narrow search by radius, or can check off whichever hospitals they would like to compare from the entire state. Search also lets the user compare all the hospitals in the state at the simultaneously.

Display of Results: Results are displayed in percentages, except for mortality rate. Mortally rate is displayed as better, similar, or worse than the US average. Sort button allows user to sort by hospital name, city, region, hospital beds, or radius from a zip code. The table also displays national average, state average, and average score for the top 10% of the state. Selecting a single hospital will bring up all the measures for a hospital, with comparison to the averages and 10% benchmark. However, all measures for a hospital are not combined into a single table, which makes the page harder to read.

Definitions of Ratings, Data, and Categories: Measured are clearly defined. About these Measures button gives clear description of every part of a measure, and where to go for more information.

Other: Users can export data to Excel. There is also an easy-print function and change search function. Guidelines on measures are clearly spelled out at the bottom of each page

Minnesota Hospital Quality Report

http://www.mnhospitalquality.org/

About: Accessed through Minnesota Health Information, this web resource designed to support and help consumers, as well as providers, by making information available about the quality and safety of care in Minnesota hospitals. This resource was developed by the Minnesota Hospital Quality Partnership, which includes the Minnesota Hospital Association and Stratis Health, Minnesota's Quality Improvement Organization.

Homepage: Homepage of this site has introductory language on how hospitals perform on quality and patient experience, as well as how the consumer should use quality information. The homepage also has two buttons to enter the quality comparison tool, One Hospital and Compare Hospitals.

Search Method: Labeled three step process. First, user chooses whether they would like to see quality or patient experience data. Those are further broken down into individual categories, measures, and questions. Then user selects a region of the state to compare results. If the user is using the One Hospital search, there is a dropdown menu of all hospitals in the state. There is no functionality to compare only certain hospitals, or to see more than one set of measures at a time.

Display of Results: Data collection period clearly stated. Ability to click on individual hospital result within searched to view detailed information. Data displayed in bar graph, which is compared to state and regional average. Percentage and number of patients is also displayed within bar graph. When a hospital does not have data displayed, there is a hyperlink to explain why there is no data. Single hospital results have many of the same functionalities, with more in-depth descriptions of measures.

Data Manipulation: Able to manipulate data very easily in results page. Ability to change measures, regions, or hospital, and can sort by name or percentage in ascending or descending order.

Definitions of Ratings, Data, and Categories: Each measure is defined only on single hospital results page. There is a short description on the page, and users can click on a more information link for a pop-up window with a longer definition.

Other: Tabs at top give users easy access to the rest of the site. Users are able to export the data to a .pdf file.

Louisiana Health Care Quality Forum

http://www.lhcqf.org
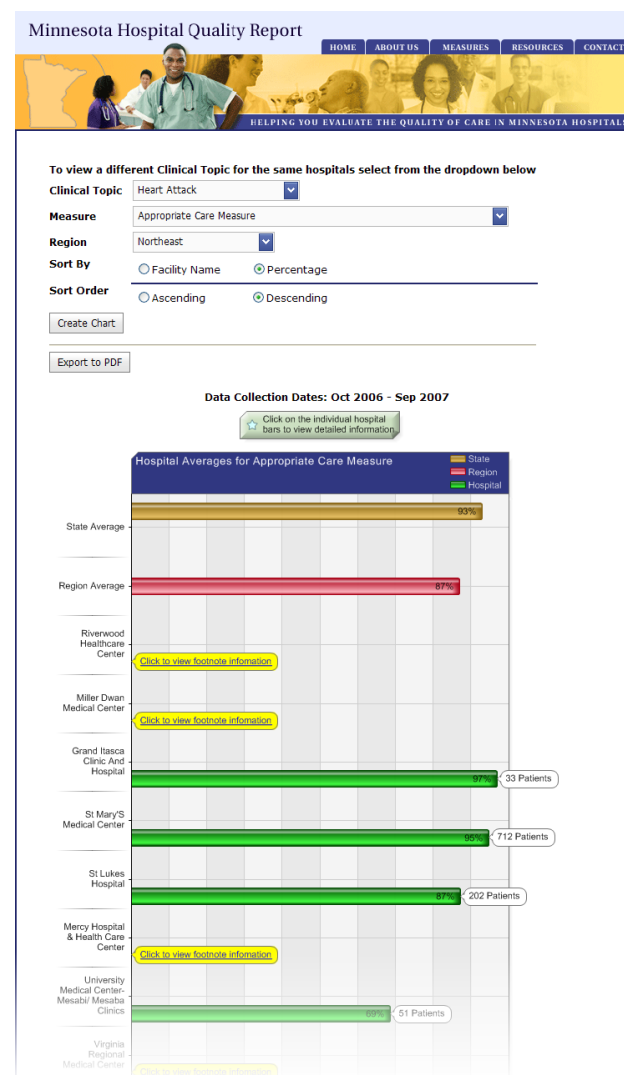
About: The Quality Forum is a new non-profit committed to improving the quality of health and health care for everyone in Louisiana, whether they have private insurance, government insurance or no insurance at all.

Homepage: The homepage contains introductory information on the organization, as well as a large button in the top left of the page to their 'quality mapping tool.' The quality mapping tool page gives more explanation on purpose of tool and organization.

Search Method: 'Quick stats' brings the user to a page where user can click on a link to access all measures by city, region, gender, and age or some single measures by region. 'Data Table' link is not obvious to user that it is part of comparison tool – but is how user can access and modify data tables. Step 1: select year; step 2: select measures – totals, costs, admin and testing, and other; step 3: select modifier – age group, region, gender, and patient condition;

Display of Results: Data is displayed in basic static table.

Data Manipulation: Once step 3 is completed, there is no way to modify or to manipulate data.

Definitions of Ratings, Data, and Categories: Data on this website is not set up for consumers and is hard to navigate unless you know exactly what you are looking for. User cannot access any data by hospital, only by region, city, gender, etc. There is also no comparison to statewide/national averages. There is not a lot of explanation on how consumers should use the data. Measures are poorly defined.

Instructions: Though not obvious on the site, provide step-by-step instructions with screenshots on how to use the site.

Other: Tabs at top give users easy access to the rest of the site. Users are able to export the data to an Excel file.

Data Table

Table 1
To select specific data to view, make selections below.
You are required to select a data year.

Year: (required) [2006-2007 Not Yet Available]

☑ 2005 ☐ 2006 ☐ 2007

Table 2
You are required to select at least 1 element to a maximum of 20 elements from the table below.

Totals:

☐ Member Months ☐ Count of Members
☐ Total number of admissions ☐ Total number of non-maternity admissions
☐ Total number of maternity admissions ☐ Total number of Emergency Room visits
☐ Total number of Primary Care Physician (PCP) visits ☐ Total number of Specialist visits
☐ Total number of non-maternity bed days ☐ Total number of eligible months per member

Costs: (PMPY=Per Member Per Year)

Admits & Testing:

Other:

[Submit] [Reset]

Your selections:
Year: 2005
Age Group: 0-17,18-44,45-64,65-84,85+,missing
Region: 1 - New Orleans
Patient Condition: Asthma (any)

Format: HTML

Year	Age Group	Region	Asthma	Total number of maternity admissions	Member Months
2005	0-17	1 - New Orleans	☑	97	130,178
2005	18-44	1 - New Orleans	☑	197	27,401
2005	45-64	1 - New Orleans	☑	0	30,783
2005	65-84	1 - New Orleans	☑	0	16,588
2005	85+	1 - New Orleans	☑	0	3,330
2005	missing	1 - New Orleans	☑	0	12
Grand Totals/Averages:				294	208,292

Maine Health Management Coalition

http://www.mhmc.info/

About: The MHMC is non-profit coalition of 60+ employers that includes doctors, hospitals, insurers, and public and private employers. MHMC is committed to bringing the purchaser and provider communities together in a partnership to measure and report on the value of healthcare services. This informs employer and employee decisions and facilitates the use of performance information by employers and employees.

Homepage: Page is designed for users/consumers in Maine. Three large buttons down the left side of the page and at top of page bring user to page to see ratings on hospitals, doctors (PCPs), and major surgeries.
Under each ratings button, there is a clear link on explanation of ratings.

Disclaimer/Caveats: Provides good disclaimer and explanations that must be read on entry page before consumers can see data.

Search Method: View Results buttons on homepage for hospitals and doctors brings user directly to results, after the user agrees to disclaimer. Major Surgeries button brings user (after disclaimer) to a page where the user can pick the procedure for which they would like to see rating.

Display of Result: Table has hospital/doctor along left side. Measures appear along top. Only three to four measures are used in ratings.

Data Manipulation: Every hospital comes up on the search. Can sort data by hospital name, city, or highest results. Can narrow down results to within a zip code search.

Definitions of Ratings, Data, and Categories: Do not use stars or percentages but rather a 'blue ribbon' if the doctor/hospital/procedure receives a satisfactory mark. Many of the categories also show how the sub measures that make up the category were rated. No percentages used or numbers used. Sub measures are given quarter, half, three quarters, and full circles. There is no way to click on ratings for more information or see what data the ratings represent.
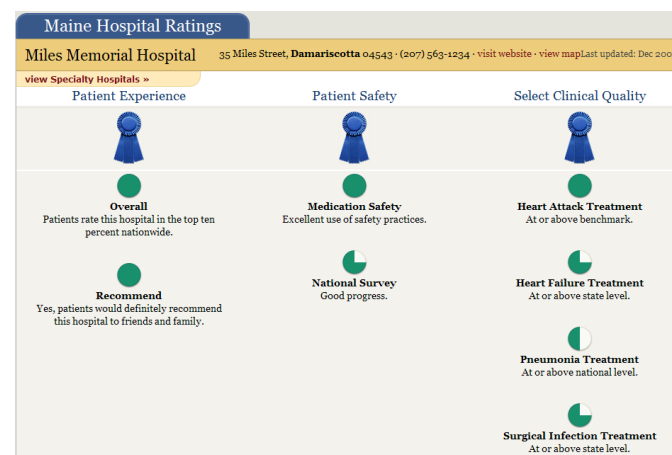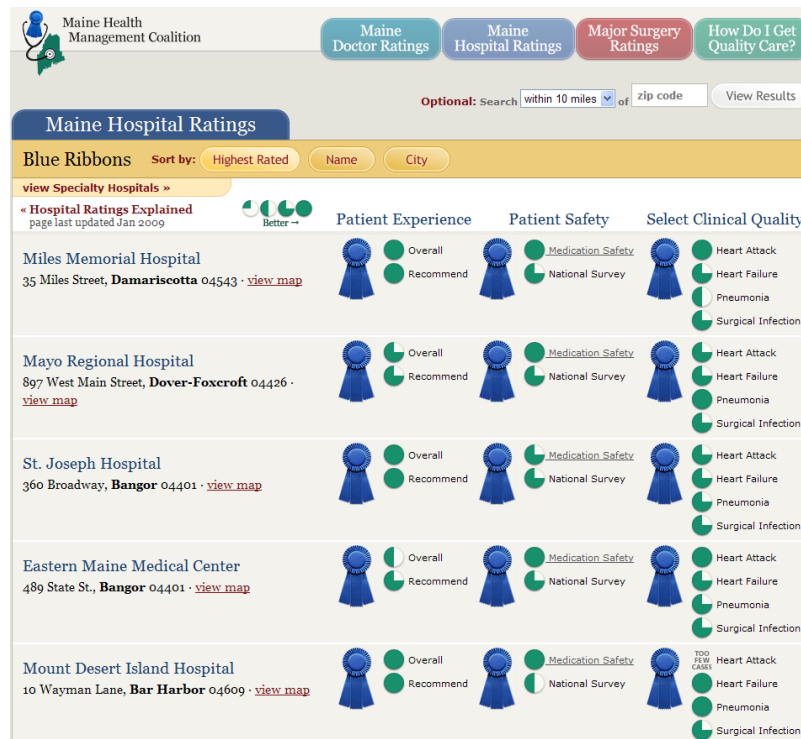
Wisconsin Collaborative Healthcare Quality

http://www.wchq.org/

About: The Wisconsin Collaborative for Healthcare Quality (WCHQ) is a voluntary consortium of organizations learning and working together to improve the quality and cost-effectiveness of healthcare for the people of Wisconsin. WCHQ developed a unique set of ambulatory care measures that enable physician groups to collect and report data on all the patients under their care. WCHQ members actively use the measures to drive internal improvement efforts and work across organizations to share their knowledge and learn from higher performing organizations.

Homepage: Homepage has two places where a user can access reports – the bottom left View Reports button, and through one of the tabs on the top left of the screen. The homepage also provides information to the three different types of users they would expect to come to the site; consumers, business/purchasers, and providers.

Help Page: This website has a very good introduction page called 'using our reports' that outlines how to use the reporting system and what the defaults of the system are.

Breast Cancer Screening [WCHQ]

This measure assesses **515,689** women who should have had at least one mammogram within the previous 24 months. **More**

Key:

Example of a physician group that reviewed their total population of patients
Physician Group A
N=24345
66.95 %
Percent of Patients Meeting Criteria

Example of a physician group that reviewed a sample of their population.
Physician Group B
N=77251 n=383
66.32 %

Total Population   Number of patients sampled

Reporting Period: Q1 2006 – Q4 2007

Sort By Rank | Sort By Name   View Map of Regions All Regions

PREFERRED →

Affinity Medical Group
N=19123 n=12161
HISTORICAL DATA
66.73 %

Aurora Advanced Healthcare
N=28821
HISTORICAL DATA
72.97 %

Aurora Medical Group
N=98086 n=383
HISTORICAL DATA
73.63 %

Aurora UW Medical Group
N=3440 n=346
63.87 %

Search Method: Topics to search in include ambulatory care, population, clinical topics, or Institute of Medicine category. From each of these categories, the user selects what measures and sub measures they would like to be displayed.
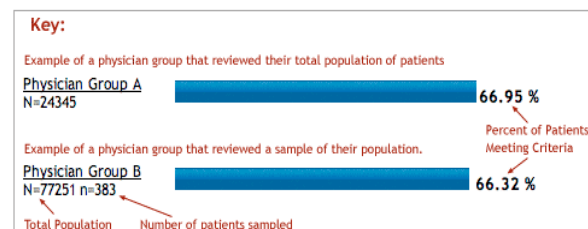
Display of Result: This website does a really good job explaining the data and why it is displayed the way it is. They display data in many different ways - including bar graphs, historical line graphs and scatter plots. The website also lets the user pull historical data. There is so much data though, that I could see it getting confusing at what to look at. There is no way to see all measures for a single hospital.

Data Manipulation: The one real problem I see with this website is that they do not let you choose what you would like to compare - hospitals/physicians can be pulled all together or by region, which may be problematic if the user is only trying to compare two or three specific hospitals.
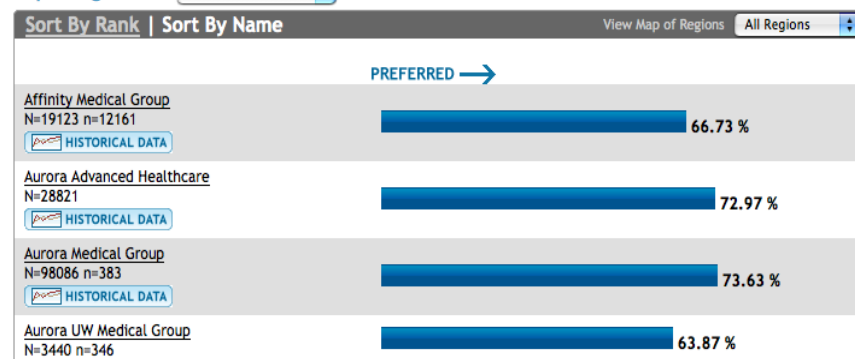
Definitions of Ratings, Data, and Categories: Measures are defined at the top of each page.

Wisconsin CheckPoint

http://www.wicheckpoint.org

About: The mission of CheckPoint is to develop consumer-focused initiatives that will provide reliable, valid measures of health care in Wisconsin to aid the selection of quality health care and quality improvement activities within the hospital field. CheckPoint provides information to: purchasers on the quality of care provided by hospitals, consumers to help them choose a hospital, and hospitals for quality improvement.

Homepage: Clear link to reporting tool in middle of page. Right side of page has buttons to jump to information for consumers, providers, purchasers, and public policy makers. Tabbed bar on top also has dropdown menu, so many of the pages within the site are accessible from homepage.

(Report Hints) (Download to Excel) (Email this Report) (New Search)										
Survey Results (%)										
Average	**Patients ranked hospital high**	**Definitely recommend hospital**	**Doctors always communicated well**	**Nurses always communicated well**	**Patients always received requested help**	**Staff always explained medications**	**Pain always well controlled**	**Always quiet at night**	**Room always clean**	**Staff provided discharge instructions**
National Average	64	68	80	74	62	59	68	56	69	80
State Average	69	70	81	77	68	63	69	58	76	84
State Benchmark	79	81	87	83	77	71	75	68	85	89
sort	sort	sort	sort	sort	sort	sort	sort	sort	sort	sort
Appleton Medical Center (Appleton)	69	76	78	73	63	65	66	50	65	90
Aspirus Wausau Hospital (Wausau)	74	79	81	76	65	61	71	64	70	88
Beaver Dam Community Hospitals, Inc. (Beaver Dam)	66	63	83	75	65	64	67	61	75	85
Bellin Hospital (Green Bay)	75	80	82	79	72	68	75	62	75	87
Beloit Memorial Hospital (Beloit)	69	73	82	80	70	67	72	53	70	83
Berlin Memorial Hospital (Berlin)	63	66	80	78	73	63	71	47	79	85
Black River Memorial Hospital (Black River Falls)	76	74	88	82	79	69	74	67	87	89
Boscobel Area Health Care (Boscobel)	64	59	78	76	70	58	70	54	76	80
Calumet Medical Center (Chilton)	79	75	82	81	78	64	69	66	90	76
Columbia Center (Mequon)	81	84	85	82	68	68	73	72	76	83
Columbia St. Mary's Hospital Milwaukee (Milwaukee)	63	68	78	75	59	59	69	56	65	82
Columbia St. Mary's Hospital Ozaukee (Mequon)	64	67	80	71	57	53	66	45	63	77

Search Method: The "what are you interested in" page give you 5 different types of reports, from individual hospital, patient experience, clinical topic, and general overview. When the user clicks continue they are brought to a page where the user can compare by region, or compare hospitals (no limit).

Display of Result: Two tables are displayed on page. Top table has state and national averages, along with state benchmark. Data is displayed in percentages, except for mortality rates, which are displayed as better, worse, or same as average. Clicking on a single percentage for a hospital will display historical data by quarter for the past 2 years for hospital, along with 90% benchmark for state.

Data Manipulation: Can sort data by any measure. No other way to edit search, unless search is started over.

Definition of Ratings, Data, and Categories: Categories and labels are defined by rolling over with cursor. All reports can be exported into an email or into Excel, and the 'report hints' tells user additional things about the site. Key at top of page provides additional information on symbols used on the page.

Minnesota Community Measurement

http://www.mnhealthcare.org/

Homepage: Homepage is very busy, with images and other topics of the organization from advertised. Able to access reports directly from homepage, which allows user to select by city, county, or condition (no hospital side-by-side comparison).

Search Method: User can search by city, county or condition. From city or county, user is taken to page where they can select provider and condition. Searching by condition brings user directly to results page. This website categorized conditions into three groups, living with illness, getting better, and staying healthy.

Display of Results: The above/below average was good to have next to the percentages - and the bar graph with average line is very illustrative. Also use star ratings on the broad categories (for example, when you search on 'staying healthily.'

Data Manipulation: There is no way to manipulate data after search screen.

Definition of Ratings, Data, and Categories: Long description of measure on top of results page, along with additional resources

What is this measure?: OPTIMAL DIABETES CARE. The percentage of patients with diabetes (Type I and Type II), ages 18-75, who reached all of the following five treatment goals to reduce the risk of cardiovascular diseases: (1) Hemoglobin A1c (HbA1c) level less than 7%; (2) Blood Pressure less than 130/80 mmHg; (3) LDL-C control less than 100 mg/dl; (4) Daily aspirin use for diabetes patients ages 41-75; and (5) Documented as tobacco free in medical record.

How was this data collected?: The data collected for this measure are from medical groups and clinics for 2007 dates of service. The data have been audited and validated by MN Community Measurement.

Legend: Clinic Average = 17%

▲above — above average (rate and confidence interval fully above clinic average)

⬤average — average (confidence interval contains clinic average)

▼below — below average (rate and confidence interval fully below clinic average)

Don't find your clinic listed?: Some clinics not reported due to small data size. Click here to view more clinics and medical groups.

Clinic Site	Rating*	Rate
AALFA Family Clinic	▲above	32%
Affiliated Community Medical Centers - Benson Clinic	⬤average	15%
Affiliated Community Medical Centers - Granite Falls Clinic	⬤average	23%
Affiliated Community Medical Centers - Litchfield Clinic	⬤average	15%
Affiliated Community Medical Centers - Marshall Clinic	⬤average	17%
Affiliated Community Medical Centers - New London Clinic	⬤average	22%
Affiliated Community Medical Centers - Redwood Falls Clinic	▲above	22%
Affiliated Community Medical Centers - Willmar Clinic	⬤average	16%

Staying Healthy

The Staying Healthy category includes measures that show how well medical groups take steps to keep people healthy and use tests to find diseases early, when they can be more successfully treated. The ratings below are sortable by clicking the words in the table's column headings.

Legend: ★ = Below Average • ★★ = Average • ★★★ = Above Average • N/A = Not reported due to small data size

Medical Group	Breast Cancer Screening	Cancer Screening Combined	Cervical Cancer Screening	Childhood Immunization	Chlamydia Screening	Colorectal Cancer Screening
AALFA	★	N/A	★★	N/A	N/A	N/A
Adefris & Toppin Women's Specialists	N/A	N/A	★★★	N/A	N/A	N/A
Advanced Specialty Care for Women	N/A	N/A	★★★	N/A	N/A	N/A
Affiliated Community Medical Centers	★★★	★★	★★	★★★	★★	★★
Alexandria Clinic, P.A.	★★	N/A	★★	★★	★	N/A
Allina Medical Clinic	★	★★	★★★	★★	★★★	★★
Altru Health System	★★	N/A	★★	★★	★	N/A
Amery Regional Medical Center	★★	N/A	★	N/A	★	N/A
Apple Valley Medical Clinic	★	N/A	★★★	N/A	★	N/A
Aspen Medical Group	★★★	★★	★★★	★★★	★★★	★
Associated Ob/Gyn	N/A	N/A	★★★	N/A	N/A	N/A

Legend: ★ = Below Average • ★★ = Average • ★★★ = Above Average • ▎ = Breast Cancer Screening Group Average: 79%

Rating	Provider Group		Rate*
★★★	Paul Larson OB/GYN Clinic, PA		99%
★★★	Obstetrics, Gynecology & Infertility, PA		94%
★★★	Clinic Sofia Ob/Gyn		93%
★★★	Oakdale Obstetrics & Gynecology, PA		92%
★★★	Grand Itasca Clinic		90%
★★★	Gundersen Lutheran		89%
★★★	Diamond Women's Center		89%
★★★	Central Lakes Medical Center, P.A.		88%
★★★	HealthPartners Medical Group		87%

Dr. Foster's Health

http://www.drfosterhealth.co.uk/

About: Dr Foster Health is the complete online medical guide resource that provides essential information on NHS and private health services in the United Kingdom. Use this website to find out about hospital waiting times, discover details about the medical professionals that could be treating you and learn the right questions to ask about your health and treatment. Dr. Foster's is the UK's leading independent provider of health information.

Homepage: Homepage is very busy, but ¼ of page is dedicated to the button to enter the comparison tool. Users can compare hospitals, birthing centers, consultants and therapy.

Search Method: Able to search by hospital or procedure, and both allow to search within certain radius. Search results are displayed and the user is able to pick one hospital from list to examine results.

Display of Result: Data is displayed in bar graphs for some results, while other results are shown with confidence intervals, and if the result is below, at, or above average. The national average is displayed with a red line. Every sub measurement is contained in a tab at the top of the box – allowing users to easily click among tabs without navigating away from the initial search webpage. Clicking the Compare button allows the user to compare the data to data from surrounding hospitals. To access explanation of data once dataset is expanded to 5 hospitals, plus sign in top right corner brings explanation back.

Definition of Ratings, Data, and Categories: The measurement for one hospital is give on the left-hand side of the box, with a full description of the data and how it should be interpreted.

Other: General hospital information (such as number of beds) along with full hospital summary and location are given on the top of every page.
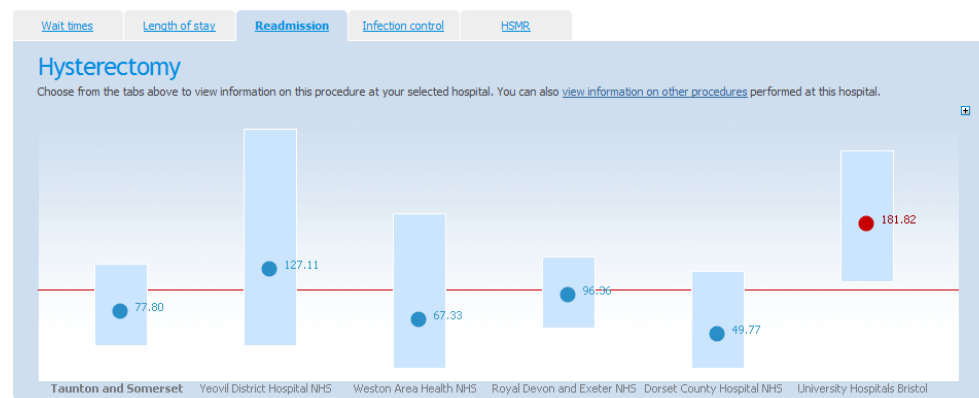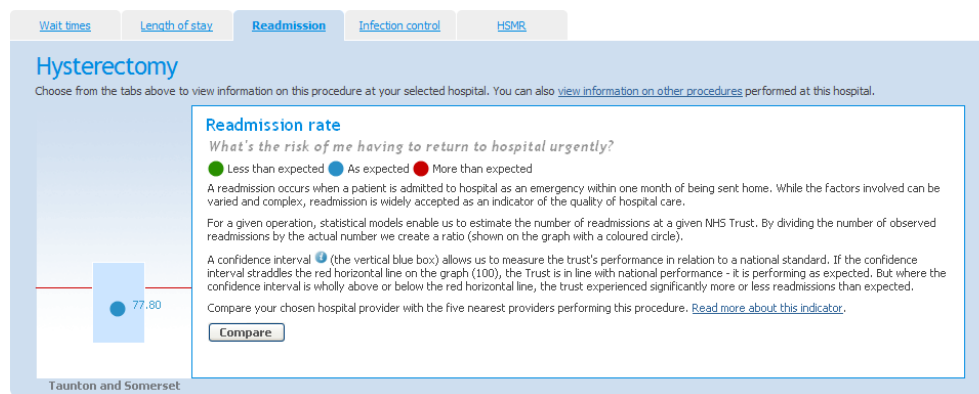
O. Definition of Summary Measure Methodologies

- **Summary Compliance Rate** (Sum of component measure numerators/Sum of component measure denominators). This is referred to as the "Opportunities" approach and is used by The Joint Commission and CMS.
- **Weighted Average Compliance Rate** (The sum of the weights assigned to component measures equals 1.0. The performance rate for each measure is multiplied by its weight and the resulting products for all component measures are summed). If the weights are equal then the adjective "Weighted" may be dropped.
- **Weighted Average Adjusted Compliance Rate** Same as the weighted average compliance rate if all measures are present; if some measures are missing then scores are calculated relative to a norm, the applicable measures are averaged, and the result is added to the overall norm. This method is used in the California reporting system.
- **Average Patient Compliance Rate** is the average of all patients' individual compliance rates. The patient level compliance rate = # component measures where each patient was in compliance/# component measures for which each patient was eligible. The Average Patient Compliance Rate = sum of individual patient compliance rates/number of patients eligible for at least 1 component measure).
- **Percent of patients in compliance on all applicable measures** (i.e., where the individual patient compliance rate described in the bullet immediately above = 100%). This is referred to as the "All or Nothing" method and is used by HealthPartners and MN Community Measurement.
- **Percent of possible points earned** (Each component measure in the summary measure is assigned a point value and points are awarded for compliance with each component measure (partial credit may be allowed). The assigned point values represent the weight assigned to each measure. Summary score = sum of awarded points across all component measures/ total assigned points for all component measures in the summary). This approach is used by The Leapfrog Group.
- **Model-based methods** Results for multiple measures may be treated as dependent variables in a statistical model which has parameters representing the "performance" of each unit studied. This approach has been used by Rand for its QA Tools and by Thomson Healthcare in composite development work in California.